

SOV/109-4-6-1/27

Diffraction of Electromagnetic Waves at a Dielectric or a Semi-conductor Sheet

where $Me^{-iv} = 1 - Te^{-i\psi}$. If the electrical vector of the plane wave is parallel to the axis z (see Figure 1), the electric and magnetic field components are given by Eqs (3). The fields at the external surface of the dielectric layer are given by Eqs (4). The electric field at point M can be evaluated from Eq (5). The z -component of this field is given by Eq (6). This can also be written as Eq (9) or Eq (10). The integral of Eq (10) can be evaluated approximately by employing the stationary-phase method. The first approximation of the integral is given by Eq (12). The final expression for E_z component is, therefore, given by Eq (18), where the integral with respect to t can be evaluated from one of Eqs (17), depending on the position of point M with respect to the shadow. It is shown in the appendix to the paper that Eq (18) is valid also for $y < 0$, i.e. when point M lies in the third quadrant. The variable t in Eq (18) is defined by the first equation on p 915.

Card3/5 The magnetic field components can easily be evaluated by

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using Eq (19). The above formulae are employed to investigate two special cases. In the first case, the wave does not undergo any attenuation but is delayed by half a period, i.e. $T = 1$ and $\psi = \pi$. If point M is to the right of the boundary and the shadow, the electric field is given by the fifth equation on page 917; on the other hand, for a point situated to the left of the boundary, the field is given by the last equation on p 917. If the sheet has a finite width and the observation point is symmetrical with respect to the boundaries, the field may be evaluated by using the variables defined by the first three equations on p 918. The theory was verified experimentally by using a sheet made of plexiglass (see Figure 4). The experiment was carried out at the wavelength of 3.2 cm and the sheet had dimensions of 100 x 100 x 2 cm. The sheet was situated on a rotating aluminium screen. A probe was placed in the centre of the screen (Figure 4). The experimental results are plotted

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in Figure 5 ('dashed' curve) together with the theoretical values (solid curve). It is seen that the theory is in good agreement with the experimental data. There are 5 figures and 4 references, 3 of which are Soviet and 1 English.

SUBMITTED: July 9, 1958

Card 5/5

1 15220264 EBC-L/EBC(t)/EBC(b)-2/FCS(k) Pac-L/Pac-2/P1-L/P3-L/P1-L
ACCESSION NR: AP4 45267

AUTHORS: Kaplun, V. A.; Timofeyev, L. M.

TITLE: Effect of plane dielectric sheet on the directional properties of antennas

SOURCE: IVUZ. Radiofizika, v. 7, no. 4, 1964, 730-735

TOPIC TAGS: antenna pattern, waveguide slot antenna, antenna shielding, dielectric layer waveguide

ABSTRACT: In view of the interest that attaches to effects of curvature dielectric sheaths of microwave antennas, the authors consider the change in the directivity pattern of an antenna provided by a flat dielectric layer of arbitrary structure in the vicinity of the antenna. The antenna is regarded as a linear source with specified phase and amplitude field distribution. Expressions are made it possible to calculate the directivity pattern.

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L 15220-65

ACCESSION NR: AP4048267

sheath combination are derived, and the results are applied to certain specific cases pertaining to flat waveguide-slot antennas. The theoretical results were checked experimentally and the agreement found was satisfactory. Orig. art. has: 5 figures and 7 formulas.

ASSOCIATION: None

SUBMITTED: 13Sep63

ENCL: 00

SUB CODE: EC

NR REF SOV: 001

OTHER: 001

Card 2/2

KAPLUN, V.A.

Calculation of the phase variation of a wave having passed
through a dielectric layer with a reactive array. Radio-
tekh. i elektron. 9 no.7:1311-1313 J1 '64 (MIRA 17:8)

L 18606-65 EWT(1)/EWA(h) Feb ASI(a)-5/ESD(c)/ESD(t)

ACCESSION NR: AP4045504

S/0109/64/009/009/1223/1210

AUTHOR: Kaplun, V. A.; Babkin, N. I.; Goryachev, B. G.

TITLE: Shielding properties of shf wire grids

SOURCE: Radiotekhnika i elektronika, v. 9, no. 9, 1964, pp. 1711-1714

TOPIC TAGS: shielding grid, shielding wire grid, shf shielding wire grid, shielding, EM shielding, rf shielding, interference, RFI

ABSTRACT: Fig. 1. of the Enclosure contains curves showing the dependence of wave field attenuation on the parameters of screen grids used for rf shielding. The calculations for these curves are based on the assumption of normal incidence of an electromagnetic wave on the grid. The grid is made of thin wires, the distance between which is small compared with the wavelength. The grid was parallel to the grid. An analysis of the calculations and experimental data show that the calculations are valid for grids

Cord 1/4

L 18606-65

ACCESSION NR: AP4045504

tions of up to 70--80 db.

ASSOCIATION: none

SUBMITTED: 01Aug63

ENCL: 02

SUB CODE: EC

NO REF SOV: 001

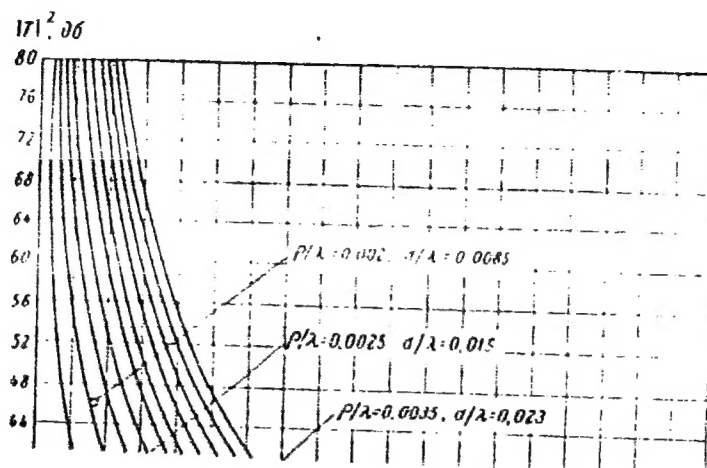
OTHER: 001

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I. 18606-65

ACCESSION NR: AP4045504

ENCLOSURE: 02



continued to Enclosure 02

Card 3/4

L 19432-65

ENT(1)/EEC(t)/ESC(b)-2

ASD(a)-5/PAEV(a)/PAEV(a)/PAEV(a)

ACCEPTE

ANTHONY, E. A., Pistoikors, A. A.

TITLE: Diffraction of a plane electromagnetic wave by a cylindrical wire embedded in a flat dielectric layer

SOURCE: Radiotekhnika i elektronika, v. 9, no. 11, 1964, 1948-1957

TOPIC TAGS: diffraction, electromagnetic wave diffraction

ABSTRACT: An equation (17) is developed which connects the propagation constant of the electromagnetic waves moving along a thin wire embedded in a flat dielectric layer parallel to the faces of the latter with the parameters of a wire-dielectric system. The propagation constant α can be calculated from the equation by referring to the curves (Fig 4) representing a part of the integral $R(\alpha)$ which is a part of the equation. A formula for the field induced by a plane electromagnetic wave falling upon the above wire.

Cord 1/2

L 19432-65

ACCESSION NR: AP4048879

Orig. art. has: 6 figures and 46 formulas.

ASSOCIATION: none

SUBMITTED: 11 May 64

SUB CODE: OP, EM

NO REF SOV: 002

ENCL: 00

OTHER: 000

Card 2/2

KAFUN, V.A.

Diffraction of plane electromagnetic waves on a lattice from
parallel conductors arranged in a dielectric layer. Izv.
yvs. ucheb. zav.; radiofiz. 8 no.4:743-759 '65.

(MIRA 18:9)

L 10821-66

ACC NR: AP5028789

SOURCE CODE: UR/0108/65/020/009/0017/0026

AUTHOR: Kaplun, V. A. (Active member)

ORG: Scientific and Technical Society of Radio Engineering and Electrocommunication
(Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi)

TITLE: Curves for determining parameters of flat dielectric layers having various structures and optimal radio-wave characteristics

SOURCE: Radiotekhnika, v. 20, no. 9, 1965, 17-26

TOPIC TAGS: shf antenna, dielectric layer

ABSTRACT: Formulas for $|P|^2$, $|R|^2$, $\Delta\psi_p$, ψ_R for these dielectric wall structures are given: single-layer, 2-layer, 3-layer symmetrical, 7-layer symmetrical, and single-layer with a reactive net in the middle (J. R. Wait, Appl. Sc. Res., Sec. B, v. 6, no. 4, 1957). Curves are plotted which permit determining parameters of single-layer and single-layer with-reactive-net walls possessing maximum radiotransparency and minimum phase distortion of transmitted-wave front; dielectric constants of 4, 5, and 6 are assumed; the curves are given for parallel and perpendicular polarizations. Curves of d/λ_0 are plotted against θ , where d is the thickness of the wall on which the wave λ_0 falls at an angle θ ; the quantities $\Delta\psi_p$ and $|R|^2$ are constant. Orig. art. has: 8 figures and 30 formulas.

SUB CODE: 09 / SUBM DATE: 07May63 / ORIG REF: 003 / OTH REF: 002

Card 1/4

UDC: 621.396

L 26053-66 EWT(d)/EWT(1)/EEG(k)-2 IJP(c) GG/WS-2

ACC NR: AP5022798

SOURCE CODE: UR/0141/65/008/004/0743/0759

AUTHOR: Kaplun, V. A.

ORG: None

TITLE: Diffraction of plane electromagnetic waves on an array of parallel wires placed into a dielectric layer

SOURCE: IVUZ. Radiofizika, v. 8, no. 4, 1965, 743-759

TOPIC TAGS: electromagnetic wave, diffraction grating, wire, radar system, dielectric layer, antenna, HF propagation/ CVCh antenna

ABSTRACT: The problem is solved for the diffraction of a plane electromagnetic wave on a cylindrical wire, placed in a plane dielectric layer. Two operating cycles were examined in the absence and presence of external excitation. The plane electromagnetic wave was the external source of excitation, falling from an arbitrary angle on a layer with a wire. The propagation constant of electromagnetic waves was found along the wire depending on parameters of the "wire-dielectric layer" system and the formula is obtained for the oscillation amplitude in the wire, determined by the amplitude which affects wave size, by the

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UDC: 621.371.167

L 26053-66

ACC NR: AP5022798

angle of incidence, by the parameters of the "wire-dielectric layer" system. Results indicated that even an extremely thin layer shows a considerable influence on the electromagnetic wave propagation velocity along the wire. When the problem is extended to the array of parallel wires arranged in a plane dielectric layer, high frequency devices in which electromagnetic waves are propagated through such systems are widely used (for example, in CVCh antennas, radar domes). The formula has been obtained for the wave number of an electromagnetic wave propagating along an array of thin parallel wires placed in a plane dielectric layer parallel to the interface. The conditions of array excitation have been considered by a plane electromagnetic wave falling on the layer. The formulas for fields inside and outside the layer are given. In conclusion, the author is grateful to A. A. Pistol'kors for his valuable advice in accomplishing this work. Orig. art. has: 9 fig. and 35 equations.

SUB CODE: 20,17/ SUBM DATE: 12Nov64/ ORIG REF: 003/ OTH REF: 001

Card 2/2 *plav*

L 00825-67 EWT(1)/EWP(e)/EWT(m) IJP(c) GG/WH/WW/GD

ACC NR: AT6015146

SOURCE CODE: UR/0000/66/000/000/0320/0321

AUTHOR: Kaplun, V. A.; Naboykin, Yu. V.; Pereverzev, Yu. A.; Pechiy, K. T.

ORG: none

TITLE: Absorption of light by excited uranium glass

SOURCE: Respublikanskiy seminar po kvantovoy elektronike. Kvantovaya elektronika (Quantum electronics); trudy seminar. Kiev, Naukova dumka, 1966, 320-321

TOPIC TAGS: light absorption, uranium glass, excited state

ABSTRACT: Wide absorption bands within the visible spectrum range were detected in some uranium-activated glasses by an impulse photometer which permitted photographing the spectra at various stages of relaxation. The absorption had a relaxation time about 1 msec and was, apparently, due to the population of the same level which produced luminescence. Spectral curves of normal absorption, excited absorption, and emission (4000--6500 Å) are shown. The last two curves partially overlap. Addition of titanium oxide or lead oxide to the glass stopped the excited-state absorption. Orig. art. has: 1 figure.

SUB CODE: 20 / SUB DATE: 12Feb66 / ORIG REF: 001 / OTH REF: 002

Cord 1/1

fv

Kaplun, V. B.

AUTHORS: Kaplun, V.B., and Akol'tsev, Ye.D., Engineer 130-12-14/24

TITLE: Use of Removable Boxes for Removing Slag (Primeneniye vydvizhnykh korobov dlya udaleniya shlaka)

PERIODICAL: Metallurg, 1957, No.12, pp. 23 - 24 (USSR).

ABSTRACT: For the removal of slag from the pockets of an open-hearth furnace (bottom area is 42.5 m^2 , total slag pocket volume 148 m^3) at the Kramatorsk Metallurgical Works, a lined box on wheels was adopted in April, 1956. The practice is outlined in this article. The slag pockets were lined with fireclay bricks and reinforced with cooled frames. The slag collecting box is made of 20 mm iron lined with asbestos and a combination of chrome-magnesite and fireclay bricks. The wheels of the box run on rails on the cast iron plates which rest on the bottom of the slag pocket. There is 1 figure.

ASSOCIATION: Kramatorsk Metallurgical Works imeni Kuybyshev
(Kramatorskiy metallurgicheskiy zavod im. Kuybysheva)

AVAILABLE: Library of Congress
Card 1/1

Kaplun, V. B.

AUTHORS: *Akol'tsev, Ye. D. and Kaplun, V. B.*

130-3-6/21

TITLE: Use of manganese ore in the scrap-ore process.
(Primeneniye margantsevoy rudy pri skrap-rudnom protsesse).

PERIODICAL: Metallurg, 1958, No.3, pp.11-13 (USSR).

ABSTRACT: In the production of rimming and killed carbon steels in the open hearth furnaces (actual charge weight 120 tons) at the imeni Kuybyshev (imeni Kuybysheva) works in Kramatorsk a high sulphur content on melting is liable to occur. The authors outline the factors leading to this (use of producer gas with 0.5% S, absence of mixer, type and amount of scrap in the charge) and the type of practice required (use of large quantity of limestone with the addition of manganese ore and bauxite during the ore boil). Experiments were carried out at the works with the object of increasing desulphurization and furnace productivity: 2 - 4 tons of manganese ore were charged under the limestone layer with the simultaneous reduction by 4 - 5 tons of the limestone and by 1 - 2 tons of the bauxite. The authors go on to describe three series of experimental heats carried out to study the influence of manganese ore on

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Use of manganese ore in the scrap-ore process.

130-3-6/21

furnace productivity, on bottom life and on steel quality and mechanical properties. The reduced quantity of non-metallics enabled a new charging sequence to be adopted giving improved heat-transfer. Comparative data for periods with and without manganese ore additions on the following are tabulated: MnO content in slag on melting and before deoxidation; Mn content in metal on melting and before deoxidation; basicity of slag before deoxidation; S-content in metal on melting and number of heats with over 0.07% S; S content in slags; rate of decarburization during the ore boil and refining boil. All data show improved values with the ore additions. No important changes in metal quality and properties resulted from the adoption of ore addition. The economic effect of the new technique is shown (Table 2) to be a saving of 780 roubles per heat. In September, October and November, 1957 the shop worked with the addition of 2 - 3 tons of manganese ore under the limestone: the duration of heats was reduced by 30 - 40 minutes and large savings were obtained through reductions in the non-metallics and deoxidizers consumed.

Card 2/2 There is 1 figure and 2 tables.

ASSOCIATION: Kramatorskiy metallurgicheskiy zavod imeni Kuybysheva
(Kramatorsk Metallurgical Works imeni Kuybyshev)

AVAILABLE: Library of Congress

18.3200

77424

SOV/130-60-1-7/22

AUTHORS: Akol'tsev, Ye. D. (Chief of Metallurgical Laboratory),
Kaplan, V. B. (Deputy Chief of Open-Hearth Shop)

TITLE: Increasing the Durability of Basic Roofs and Checkers

PERIODICAL: Metallurg, 1960, Nr 1 pp 14-16 (USSR)

ABSTRACT: In 1957 at the Kramatorsk Metallurgical Plant, two open-hearth furnaces were rebuilt for work with basic roofs. The furnaces work on scrap process and specialize in the production of rimmed steel. A cross-braced suspended design of the roof with reinforcement of the magnesite-chromite brickwork by metal rods and plates was adopted. The hot generator gas with addition of 10% coke gas was used as fuel. The investigation shows that low durability of roof is a result of cooling during hot repairs and soot-cleaning. The temperature of roof drops from 1,720° to 900° C, causing thermal spalling of 30 to 60 mm

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Increasing the Durability of Basic Roofs and
Checkers

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of brick layer. To prevent spalling, temperature of the roofs during hot repairs and soot-cleaning was raised up to $1,300^{\circ}\text{C}$ using newly developed ejector burner working on coke gas. The capacity of burners (under the pressure of 3 to 4 atm) is 1,500 to 1,800 m^3/hr of gas supply. The burning of the roof under the front wall, and especially at the third charging door, caused by suction of cold air, can be eliminated by decreasing the time of keeping the doors open. The above improvement increased the life of the roof up to 400 melts.

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Increasing the Durability of Basic Roofs and
Checkers

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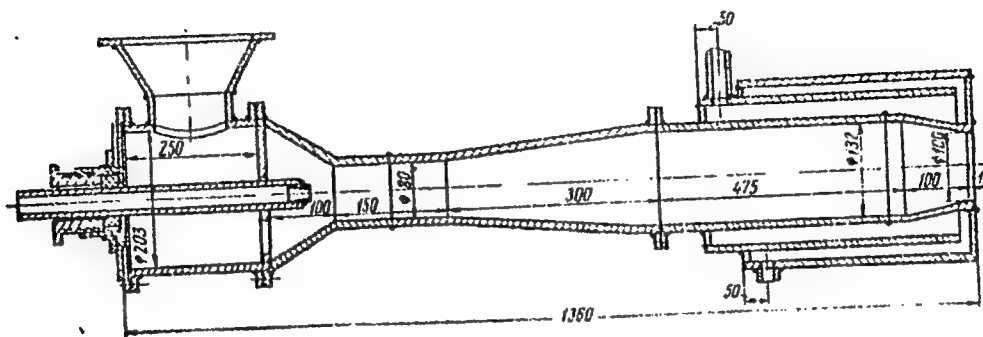


Fig. 1. Ejector burner for heating the roof during
hot repairs.

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Increasing the Durability of Basic Roofs and
Checkers

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For increasing the durability of checkers, the following measures were recommended: (1) The upper 6-7 rows of air checkers must be of forsterite or chamotte refractories. Below the forsterite checkers 8-9 rows of bricks must be of dinas and 12 rows of chamotte bricks. (2) The upper 5-6 rows of gas checkers should be of chamotte brick. The use of these bricks increased the life of checkers up to 450 melts. The bricks of lower rows can be utilized during repairs for additional service. Physicochemical properties of refractories are shown in Table 2.

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Increasing the Durability of Basic Roofs and Checkers

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Table 2

Physicochemical properties of refractories used for checkers.

Refractory	Type	Refractories °C	Porosity %	Chemical Comp. %			
				SiO ₂	MgO	Cr ₂ O ₃	Al ₂ O ₃
Dinoschromite	MP-4	1690	17,6	84,0	—	6,5	—
Magnesite	MRHS-3	1750	18-24	—	60-75	8-18	—
Chromite		1800					
Chamotte	PM-60	1670	30	64	—	—	32
Forsterite	F-3	1800	18-30	32	54	—	—
	F-4						

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Increasing the Durability of Basic Roofs
and Checkers

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There are 2 figures; and 2 tables.

ASSOCIATION: Kramatorsk Metallurgical Plant (Kramatorskiy
metallurgicheskiy zavod)

Card 6/6

KAPLUN, V.A., inzh.

The KZU-0.3^B universal trench excavator and grader. Ma-hinostroenie
no. 2:93-94 Mr-Ap '64. (MJRA 17:5)

KAPLUN, V. B.

TAMRAZIAN, G.P.; KAPLUN, V.B.

Characteristics of the chemical composition and formation of
waters in the 8th horizon of Balakhany series in the Apsheron
Peninsula pay stratum. Dokl.AN Azerb.SSR 13 no.7:769-774 '57.
(MIRA 10:7)

1. Institut geologii. Predstavleno akademikom AN Azerbaydzhanskoy
SSR M.A. Kashkayev.
(Apsheron Peninsula--Water, Underground) (Petroleum geology)

MEL'MAN, N.Ya., kand.med.nauk; ~~KAPLUN, V.G.~~ (Kiyev)

So-called hepatocholecystic pancreatitis. Vrach. delo no.7:
140 JI'63. (MIRA 16:10)
(PANCREAS—DISEASES) (LIVER—DISEASES)

KAPLUN, V.M.

Rare case of gigantic ovarian cystoma. Sov.med. 23 no.11:146-147
N '59. (MIRA 13:3)

1. Iz ginekologicheskogo otdeleniya ob'yedinennoy bol'nitsy Okha-na
Sakhaline (glavnyy vrach I.P. Zolotikhin).
(OVARY diseases)

KAPLUN, V.M.

Rare type of monster. Akush. i gin. 35 no.3:125 My-Je '59.
(MIRA 12:8)

1. Iz rodil'nogo oddeleniya ob"edinennoy bol'nitsy (glavnyy
vrach I.P.Zolotikhin) g.Olcha-na-Sakhaline.
(MONSTERS)

KAPLUN, V.M.

Birth of a giant fetus. Vop. okh. mat. i det. 6 no.11:83-84 N '61.
(MIRA 14:12)

1. Iz rodil'nogo otdeleniya ob'yedinennoy bol'nitsy g. Okhi na
Sakhaline (glavnyy vrach I.P.Zolotikhin).
(FETUS) (LABOR (OBSTETRICS))

KAPLUN, V.M.; BAGROV, O.N.

Purification of industrial sewage at the Severski Metallurgical Plant. Stal' 21 no.10:959 0 '61. (MIRA 14:10)

1. Sverdlovskiy sovnarkhoz.

(Polevskoy—Metallurgical plants—Water supply) -
(Sewage—Purification)

KAPLUN, V.M.

Errors in the diagnosis of extrauterine pregnancy. Ka-
Med. Zhur. no.6:59-60 '62. (MIRA 17:5)

1. Ginekologicheskoye otdeleniye Okhinskoy na Sakhaline gorodskoy
bol'nitsy (ispolnyayushchiy obyaznnosti glavnogo vracha -
E.G. Khandrilova).

VILENSKIY, Nisson Moiseyevich; KAPLUN, V.M., retsentsent; CHAPAYKINA,
F.K., red. 12d-va; KOROL', V.I., tekhn. red.

[Effective use of secondary power resources] Ratsional'noe
ispol'zovanie vtorichnykh energeticheskikh resursov. Mo-
skva, Metallurgizdat, 1963. 271 p. (MIRA 16:12)
(Power (Mechanics))
(Electric power plants)

KOZLOV, L.A., assistant (Kazan'); SADYKOV, B.G., aspirant (Kazan');
GUSEVA, A.A., vrach-kursant; SHISHKINA, G.G., vrach-kursant;
YUR'YEVA, G.Ye, Vrach-kursant; KAPLUN, V.M. (Okha na Sakhaline)

Discussion. Kaz.med.zhur. no.1:102 Ja-F'63. (MIRA 16:8)

1. Akushersko-ginekologicheskiy tsikl Novokuznetskogo gosudarstvennogo instituta dlya usovershenstvovaniya vrachey
(for Guseva, Shishkan, Yur'yeva).
(NO SUBJECT HEADINGS)

KAPLUN, V.N.; SIGRIANSKIY, Ye.P.

Automatic temperature regulation for defiberizing. Bum.prom.
34 no.7:10-11 J1 '59. (MIRA 12:10)

1. Balakhinskiy tsellyulozno-bumazhnyy kombinat.
(Woodpulp)

KAPLUN, V.N., inzh., KOYUSHEVA, S.I.

Continuous beating of refined pulp and processing of chips.
Bum.prom. 35 no.8:20-22 Ag '60. (MIRA 13:8)

1. Balakhninskiy tsellyulozno-bumazhnyy kombinat.
(Balakhna--Woodpulp)

KAPLUN, V.V.; SYUTKIN, V.P.

Simple dividing head. Mashinostroenie no. 6244-45 N-D '64
(MIRA 1882)

KAPLUN, Ya.A., inzh.; LOKSHIN, Ye.F., inzh.

Selecting steel brands in making steel construction elements
for industrial buildings. Stroi.prom. 27 no.7:18-19 J1 '49.
(MIRA 13:2)

1. Proyektstal'konstruktsiya.
(Steel, Structural)

KAPLUN, Ya.A., inzh.

Most efficient distribution of material in cross sections of
elements subjected to bending. Stroi. prom. 36 no. 9:37-40
S '58. (MIRA 11:10)

(Girders)

KAPLUN, Ya.B.; LEVIN, A.N.

Method for the design of extruder feed throats. Plast.massy no.3:54-60
'61. (MIRA 14:3)

(Extrusion process) (Thermoplastics)

15.8500

38068

S/191/62/000/006/010/016
B110/B138

AUTHOR: Kaplun, Ya. B.

TITLE: Pressure gage in the melt of thermoplastic material

PERIODICAL: Plasticheskiye massy, no. 6, 1962, 44

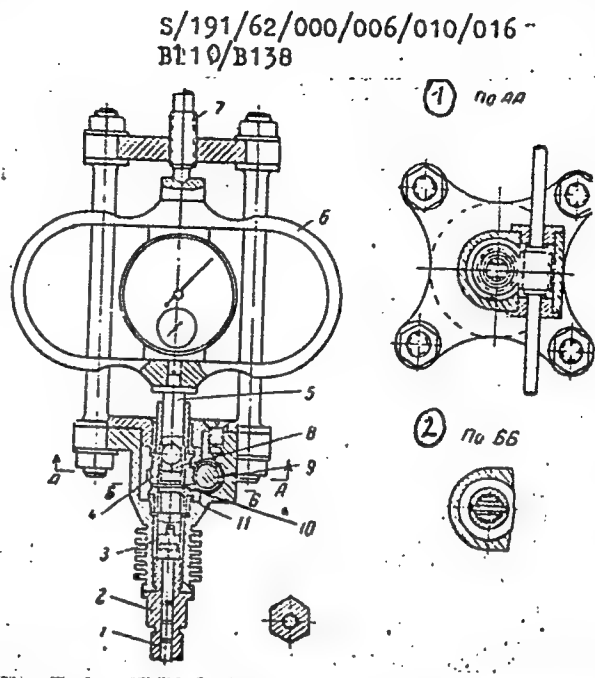
TEXT: A pressure gage was developed with (A) a piston which takes the pressure of the melt and rotates continuously at 3-8 rpm during operation. Rotation is transmitted by a flexible shaft, which is connected to any rotating part, e. g., to the end of the extruder spiral; (B) a standard pressure dynamometer, LC-0.2 (DS-0.2), as an elastic indicator. The pressure of the melt is transmitted to piston (1) (see Fig.) in cylinder (2) and further via an insert piece (3) to shaft (8). From there, via (5), the pressure reaches dynamometer (6) which is attached to the apparatus by screw (7). (1) is rotated by (3) and (8). Shaft (8) has a longitudinal slot, through which leads pin (10) with a freely rotating roller (11). During rotation of worm (9), the bushing turns shaft (8) via pin and roller. The "cylinder-piston" pair can easily be exchanged by spare parts. The instrument is lubricated with graphite. There is

Pressure gage in the melt...

1 figure.

Fig.: Diagram of pressure gage in
in melt.

Legend: (1) section AA,
(2) section BB



Card 2/2

KAPLUN, Ya.B.; LEVIN, A.N.

Design and construction of the inlet area of the extruder.
Plast.massy no.1:39-46 '64. (MIRA 17:6)

KAPLUN, Ya.B.; LEVIN, A.N.

Taking into account the elastic aftereffect in designing a molding
tool for the extrusion of thermoplastics. Plast. massy no.2:46-51
'65. (MIRA 18:7)

KAPLUN, Ya.G.

Introducing the UTO wild-oat separating unit. Biul. tekhn.-ekon.
inform. Gos. nauch.-issl. inst. nauch. i tekhn. inform. 18 no.10:
42-43 0 '65. (MIRA 18:12)

SOLOV'YANOV, Leonid Nikolayevich; KAPLUN, Ya.G., professor tekhnicheskikh nauk, retsenzent; TROFIMOV, P.F., retsenzent; redaktor; PARTSEVSKIY, V.N., redaktor; BEKKER, O.G., tekhnicheskiiy redaktor

[Servicing bits and rods for pneumatic hammer drills; textbook for schools and foremen's courses] Zapravka burov i shtang dlia pnevmaticheskikh buril'nykh molotkov; uchebnoe posobie dlia shkol i kursov masterov. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1955. 128 p. (MLRA 8:10)
(Boring machinery)

KAPLUN, Ya.G., professor, doktor tekhnicheskikh nauk; SHUSTOV, N.V., gornyy
inzhener

Using the BMK-2 boring machine in shaft sinking. Gor. zhur. no.4:18-24
Ap '55. (Boring machinery) (Shaft sinking) (MLRA 8:7)

KAPLAN, Ya.G.

ANDROS, I.P., inzh.; ASSONOV, V.A., kand. tekhn. nauk.; BERNSHTEYN, S.A., inzh.; BOKIY, B.V., prof.; BROVMAN, Ya.V., inzh. BONDARENKO, A.P., inzh.; BUCHNIN, V.K., kand. tekhn. nauk; VERESKUNOV, G.P., kand. tekhn. nauk; VOLKOV, A.P., inzh.; GELESKUL, M.N., kand. tekhn. nauk; GORODNICHENOV, V.M., inzh.; DEMENT'YEV, A.Ya., inzh.; DOKUCHAYEV, M.M., inzh.; DUBNOV, L.V., kand. tekhn. nauk; LEPIFANTSEV, Yu.K., kand. tekhn. nauk; YERASHKO, I.S., inzh.; ZHEKIDANOV, S.A., kand. tekhn. nauk; ZIL'BERBROD, A.F., inzh.; ZINGHENKO, E.M., inzh.; ZORI, A.S., inzh.; KAPLAN, L.B., inzh.; KATSAUROV, I.N., dots.; KITAYSKIY, E.V., inzh.; KRAVTSOV, Ye.P., inzh.; KRIVOROG, S.A., inzh.; KRINITSKIY, L.M., kand. tekhn. nauk; LITVIN, A.Z., inzh.; MALEVICH, N.A., kand. tekhn. nauk; MAN'KOVSKIY, G.I., doktor tekhn. nauk; MATKOVSKIY, A.L., inzh.; MINDELI, E.O., kand. tekhn. nauk; NAZAROV, P.P., kand. tekhn. nauk; NASONOV, I.D., kand. tekhn. nauk; NEYYENBURG, V.Ye., kand. tekhn. nauk; POKROVSKIY, G.I., prof., doktor tekhn. nauk; PROYAVKIN, E.T., kand. tekhn. nauk; ROZENBAUM, inzh.; ROSSI, B.D., kand. tekhn. nauk; SEMEVSKIY, V.N., doktor tekhn. nauk; SKIRGELLO, O.B., inzh.; SUKHUT, A.A., inzh.; SUKHANOV, A.P., prof., doktor tekhn. nauk; TARANOV, P.Ya., kand. tekhn. nauk; TOKAROVSKIY, D.I., inzh.; TRUPAK, N.G., prof., doktor tekhn. nauk; FEDOROV, S.A., prof., doktor tekhn. nauk; FEDYUKIN, V.A., inzh.; KHOKHLOVKIN, D.M., inzh.; KHRABROV, N.I., kand. tekhn. nauk; CHEKAROV, V.A., inzh.; CHERNAVKIN, N.N., inzh.; SHREYBER, B.P., kand. tekhn. nauk; EPOV, B.A., kand. tekhn. nauk; YAKUSHIN, N.P., kand. tekhn. nauk; YANCHUR, A.M., inzh.; YAKHONTOV, A.D., inzh.; POKROVSKIY, N.M., otvetstvennyy red.; KAPLUN, Ya.G. [deceased], red.; MONIN, G.I., red.; SAVITSKIY, V.T.,

(Continued on next card)

ANDROS, I.P.---(continued) Card 2.

red.; SANOVICH, P.O., red.; VOLOVICH, M.Z., inzh., red.; GORITSKIY, A.V., inzh., red.; POLUYANOV, V.A., inzh., red.; FADEYEV, E.I., inzh., red.; CHIRCHKOV, L.V., red. izd-va; PROZOROVSKAYA, V.L., tekhn. red.; NADZINSKAYA, A.A., tekhn. red.

[Mining; an encyclopaedic handbook] Gornoe delo; entsiklopedicheskiy spravochnik, Glav. red. A.M. Terpigorev. Moskva, Gos. nauchno-tekhnicheskoe izd-vo lit-ry po ugol'noi promyshl. Vol. 4 [Mining and timbering] Provedenie i krepleniye gornykh vyrabotok. Redkollegiya: N.M. Pokrovskiy... 1958. 464 p. (MIRA 11:7)

(Mine timbering) (Mining engineering)

CHUZH, O.I.; KAPLUN, Ye.A.

Modernization of AT-175 Sh looms. Leh.prom. no.2:66-67 Ap-Je '65.
(MIRA 18:10)

YELKIN, Vasilii Gavrilovich; KAPLUN, Yefim Iosifovich; ZAROVNIY, P.B.,
red.; SHNEYEROV, S.A., red.izd-va; SHLIKHT, A.A., tekhn.red.

[Domestic appliances using liquefied gas] Bytovye ustanovki
zhidkogo gaza. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1959.
111 p. (MIRA 13:1)
(Liquefied petroleum gas) (Gas appliances)

KAPLUN, Yefim Iosifovich; SHAL'NOV, A.P., spets. red.; LYUBINA,
R.M., red.

[Handbook for insulation workers on city gas pipelines]
Pamiatka dlia izolirovshchika gorodskikh gazoprovodov.
Moskva, Stroiizdat, 1964. 46 p. (MIRA 18:2)

KAPLUN, Ye. S.

Cand Tech Sci

Dissertation: "On the Theory of the Cementation Process in the Hydro-metallurgy of Zinc."

24 Oct. 49

Moscow Inst of Nonferrous Metals and Gold
imeni M. I. Kalinen

SO Vecheryaya Moskva
Sum 71

KAPLUN, Y. V.

USSR/Physics - Magnetization, Hysteresis

Nov/Dec 52

"Variations of Magnetic Hysteresis Loops During Variations of Maximum Magnetization,"
V. I. Drozhshina, R. I. Yama, V. P. Kartashov, and E. V. Kaplun, Inst of Phys
of Metals, Ural Affiliate, Acad Sci USSR

In Akh Med: USSR, Ser Fiz, Vol 16, No 6, pp 703-712

Analysis of behavior of microstructure of magnetism related to magnitude and direction
of magnetic field. Expts show greatest magnetic hysteresis to correspond to
remagnetization processes below saturation point. Problem was also analyzed by
N. S. Akulov (Ferromagnetism, 1939)

PA 251729

KAPLUN, Yu.V.; BOGOMOLOV, M.A., otv. red.

[Forty years of the Donetsk Polytechnical Institute] Donetskii
ordena Trudovogo Krasnogo Znamenii politekhnicheskii institut
za 40 let. Stalino, Knizhnoe izd-vo, 1961. 124 p.

(MIRA 15:12)

(Donetsk--Technical education)

FEDORYAK, G.M., inzh.; KAPLUN, Ye.Ye.

Preliminary cementation of water-bearing rock in vertical shaft sinking in a Krivoy Rog Basin mine. Shakht. stroi. 8 no.9:27-28 S '64. (MIRA 17:12)

1. Trest Krivbassshakhtoprokhodka (for Fedoryak). 2. Shakhtoprokhodcheskoye upravleniye No.1 tresta Krivbassshakhtoprokhodka (for Kaplun).

KAPLUN, Z.

Walnut. Nauka i pered. op. v sel'khoz. 8 no.8:25 Ag '58.

(MIRA 11:10)

(Walnut)

L 2526-66 BWT(d)/FSS-2/BWT(1)/EWA(h) JM
ACCESSION NR: AP5021347

UR/0120/65/000/004/0136/0139
621.385.633.2:621.3.029.66

AUTHORS: Golant, M. B.; Vilenskaya, R. L.; Zyulina, Ye. A.; Kaplan, I. F.;
Negirev, A. A.; Parilov, V. A.; Rebrova, T. B.; Savell'yev, V. S.

TITLE: A series of wide-range low-power generators of millimeter and submillimeter waves

SOURCE: Pribery i tekhnika eksperimenta, no. 4, 1965, 136-139

TOPIC TAGS: short wave radiation, backward wave tube, oscillator

ABSTRACT: Backward wave tubes represent the principal type of wide-range low-power generators of waves in the millimeter and submillimeter range. The purpose of this article is to acquaint scientists and technical workers with such devices. The characteristics of seven backward wave tubes are tabulated: OV-612, OV-613, OV-614, OV-622, LOV-0.5, LOV-1.0, and LOV-1.5. Wavelengths range from 0.49 to 8 mm, frequencies from 37.5 to 375 Gc, voltage changes from 2 to 4000 v, current from 30 to 50 mamp, power from 1 to 200 mw, and weight from 5 to 10 kg. Ranges overlap, and it is possible with these tubes to cover the entire range from one-half to eight millimeters. Orig. art. has: 8 figures and 2 tables. [04]

Card 1/1

L 2526-66

ACCESSION NR: AP5021347

ASSOCIATION: NONE

SUBMITTED: 20 Nov 64

NO REF SOV: 000

ENCL: 00

OTHER: 000

SUB CODE: 80

ATD PRESS: 4108

led
Card 2/2

Kaplun, Z.I.

Fistula

Case of biliobronchial fistula. Klin. med., 30, No. 6, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

SEREBRENNIKOVA, Ye.M.; KAPLUN, Z.I.

Malignant nephritis. Ter. arkh., Moskva 25 no. 1:63-70 Jan-Feb
1953. (CLML 24:1)

1. Serebrennikova, deceased. 2. Of the Propedeutic Therapeutic
Clinic and of the Department of Pathological Anatomy (Head -- Academ-
ician A. I. Abrikosov), First Moscow Order of Lenin Medical Institute.

KAPLUN, Z. S.

MEDICINE
INDUSTRIAL HYGIENE

DECEASED

1964

PLOTNIKOV, V.; KAPLUNENKO, B.

"Mikro" transistor radio, receiver. Radio no.7:29-30 J1 '63.
(MIRA 16:7)

(Transistor radios)

KAPLUNENKO, M.F. .

Vegetative reproduction of some conifers. Visnyk Bot.sada
AN URSR no.4:5-7 '62. (MIRA 16:1)
(Ukraine—Arborvitae)

KAPLUNENKO, N.F.

Fruit bearing by arbor vitae and Biota in Kiev. Biul. Glav.
bot. sada. no.49:113-115 '63. (MIRA 16:8)

1. TSentral'nyy respublikanskiy botanicheskiy sad AN Ukrainskoy
SSR, Kiyev.
(Kiev—Thuja) (Seed production)

KAPLUNENKO, N.I.

Photom. of paleontological objects. Int. no ist. fauna
1 along Kazakh. 3:191-193 '61. (MIR 14:7)
(Nature Photography)
(Paleontology)

POMERANTS, L.I.; KAPLUNOV, A.I.

Laboratory OKS-56 for automatic logging stations working with
single-core cables. Razved. i prom. geofiz. no.28:33-91 '59.
(MIRA 13:1)

(Oil well logging, Electric)

POMERANTS, L.I.; KAPLUNOV, A.I.

NGGK-57 type apparatus for radioactive logging. Razved.i
prom.geofiz. no.29:82-105 '59. (MIRA 13:1)
(Oil well logging, Radiation)

KAPLUNOV, A.I.; TSVETKOV, V.S.

SKL-62 seismic logging laboratory. Mash. i nef. obor. no.10:
5-13 '63. (MIRA 17:4)

1. Zavod "Neftepribor".

ACC NR: AP6005350

SOURCE CODE: UR/0413/66/000/001/0092/0093

AUTHORS: Kaplunov, A. I.; Vekaler, B. Ye.; Malinskiy, S. A.; Tsvetkov, V. S. 36

ORG: none 3

TITLE: Multichannel device for seismic logging of bores. Class 42, No. 177642
[announced by "Neftepribor" Factory (Zavod "Neftepribor")]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 92-93

TOPIC TAGS: seismologic instrument, electronic circuit

ABSTRACT: This Author Certificate presents a multichannel device for seismic logging of bores. The device contains seismic detectors, amplifiers, carrier frequency oscillators, electric filters, modulators, demodulators, a magnetic recorder, and a power supply. To broaden the dynamic range of the received signals, electrical sections are connected in each channel between the modulator tube and the communication line networks (see Fig. 1). The sections are made of crystal diodes (connected in opposition) and resistors and are connected to the programming

Card 1/2

UDC: 550.340.84

1. 02079-66

ACC NR: AP6005350

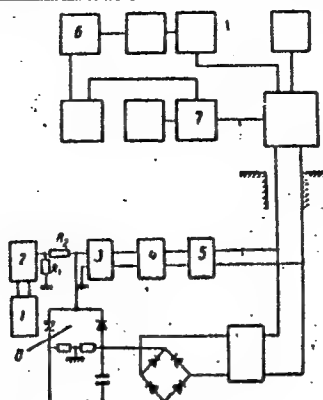


Fig. 1. 1 - seismic detector;
2 - amplifier (modulator);
3 - amplifier; 4 - carrier
frequency oscillator; 5 - filter;
6 - demodulator; 7 - recorder;
8 - electrical sections

device. Orig. art. has: 1 diagram.

SUB CODE: 08,09/ SUBM DATE: 19Nov64

Card 2/2 af

L 07335-67 EWT(1) GW

ACC NR: AP6012112

SOURCE CODE: UR/0413/66/000/007/0022/0022

AUTHORS: Kaplunov, A. I.; Veksler, B. Ye.; Volkhonskiy, V. M.; Remennikov, V. S.; Shemshurin, S. V. ²⁵_B

ORG: none

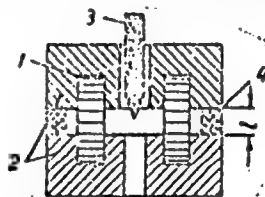
TITLE: Thermostabilized generator for a seismic core probe. Class 21, No. 180221

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 22

TOPIC TAGS: seismologic instrument, electronic oscillator

ABSTRACT: This Author Certificate presents a thermostabilized generator for a seismic core probe. The tank circuit contains a ferrite trimmer and an induction coil placed on a ferrite core with a gap (see Fig. 1).

Fig. 1. 1 - induction coil;
2 - core; 3 - trimmer; 4 - gasket



To stabilize the generated frequency in a wide range of temperatures, the core gap has a height of 0.08 to 0.2 times the height of the core. A nonmagnetic ring gasket is placed between the outer walls of the core cups. Orig. art. has: 1 diagram.

Card 1/1 vmbSUD CODE: 02,07/ SUD: DATE: 18Nov66 UDC: 550.340.84 621.373.4

LYAPUNOV, Boris Valerianovich; KAPLUNOV, A.S., red.; ATROSHCHENKO, L.Ye.,
tekhn.red.

[Man goes into outer space] Chelovek vykhodit v kosmos. Moskva,
Izd-vo "Znanie," 1960. 37 p. (Vsesoiuznoe obshchestvo po ras-
prostraneniю politicheskikh i nauchnykh znaniy. Ser.10, no.11)
(MIRA 13:11)

(Astronautics)

KONDRAT'YEV, Petr Vladimirovich; KAPLUNOV, A.S., red.; RAKITIN, I.T.,
tekh. red.

[Heroes of the skies; stories about test pilots] Geroi nebesnykh
prostorov; rasskazy o letchikakh-ispytateliakh. Moskva, Izd-vo
"Znanie," 1961. ~46 p. (Vsesoiuznoe obshchestvo po rasprostraneniui
politicheskikh i nauchnykh znani. Ser.19, Molodeshnaiia, no.21)
(MIRA 14:11)

(Airplanes--Flight testing) (Air pilots)

NAIDENOV, Mikhail Yemel'yanovich; KAPIUNOV, A.S., red.; BERLOV, A.P., tekhn.
red.

[The strengthening of the union of working class and peasantry
that effected the collectivization of agriculture] Ukreplenie
soiuza rabocheho klassa i krest'ianstva v resul'tate kollekti-
vizatsii sel'skogo khoziaistva. Moskva, Izd-vo "Znanie," 1958.
47 p. (Vsesoiuznoe obshchestvo po rasprostraneniui politicheskikh
i nauchnykh znani. Ser.1, no.26). (MIRA 11:10)
(Russia—Economic policy) (Collective farms)

NAFLUMOV 43.
KORNIYENKO, Daniil Iosifovich, general-mayor.; ZUBKOV, I.I., general-mayor,
nauchnyy red.; KAPLUNOV, A.S., red.; BERLOV, A.P., tekhn. red.

[Role of the morale factor in modern war] O roli moral'nogo faktora
v sovremennoi voine. Moskva, Izd-vo "Znanie," 1958. 47 p.
(Vsesoiuzhoe obshchestvo po rasprostraneniю politicheskikh i
nauchnykh znaniy. Ser. 1, no. 28). (MIRA 11:11)
(Morale)

KOLESHNIK, Aleksandr Dmitriyevich; KAPLUNOV, A.S., red.; ATROSHCHENKO,
L.Ye., tekhn.red.

[Soviet Transcarpathia in the fraternal family of U.S.S.R.
peoples] Sovetskoe Zakarpat'e v bratskoi sem'e narodov SSSR.
Moskva, Izd-vo "Znanie," 1960. 31 p. (Vsesoiuznoe obshchestvo po
rasprostraneniю politicheskikh i nauchnykh znaniy. Ser.1,
Istoriia, no.9) (MIRA 13:3)

(Transcarpathia--History)

(Transcarpathia--Economic conditions)

AKHUNDOV, Veli Yusufovich; KAPLUNOV, A.S., red.; ATROSHCHENKO, L.Ye.,
tekh.n.red.

[Forty years of Soviet Azerbaijan] 40 let Sovetskogo Azerbaidzhana.
Moskva, Izd-vo "Znanie," 1960. 37 p. (Vsesoiuznoe obshchestvo po
rasprostraneniю politicheskikh i nauchnykh znaniy. Ser.1, Istoriia,
no.12). (MIRA 13:3)

1. Sekretar' TSentral'nogo komitet kommunisticheskoy partii Azerbay-
dzhana (for Akhundov).
(Azerbaijan--History) (Azerbaijan--Economic conditions)

CHANGLI, Irina Ivanovna, kand.ekonom.nauk; KAFLUNOV, A.S., red.;
SAVCHENKO, Ye.V., tekhn.red.

[Standard-bearers of communist labor] Znamenostsy kommunisti-
cheskogo truda. Moskva, Izd-vo "Znanie," 1960. 39 p. (Vse-
soiuznoe obshchestvo po rasprostraneniю politicheskikh i
nauchnykh znaniy. Ser.1, Istoriia, no.19). (MIRA 13:7)
(Efficiency, Industrial)

POKROVSKIY, Boris Vasil'yevich; KAPLUNOV, A.S., red.; SAVCHENKO, Ye.V.,
tekhn.red.

[CPSU in the struggle for technological progress] KPSS v bor'be
za tekhnicheskii progress. Moskva, Izd-vo "Znanie," 1960. 39 p.
(Vsesoiuznoe obshchestvo po rasprostraneniю politicheskikh i
nauchnykh snanii. Ser.1, no.36). (MIRA 14:1)
(Technology)

KUMANEV, Georgiy Aleksandrovich, kand. istor. nauk; KAPLUNOV, A.S., red.;
RAKITIN, I.T., tekhn. red.

[Creative activity of the working class of the U.S.S.R. during the
large-scale building of communism] Tvorcheskaya deiatel'nost' rabo-
chego klassa SSSR v period razvernutogo stroitel'stva kommunizma.
Moskva, Izd-vo "Znanie," 1961. 30 p. (Vsesoiuznoe obshchestvo po
rasprostraneniю politicheskikh i nauchnykh znaniy. Ser. 1, Istorija,
no.17) (MIRA 14:9)

(Labor and laboring classes)

(Socialist competition)

KONKIN, Aleksandr Arsen'yevich; BIRGER, Georgiy Yefimovich; KAPLUNOV, A.S.,
red.; SAVCHENKO, Ye.V., tekhn.red.

[Miracle fibers] Chudesnye volokna. Moskva, Izd-vo "Znanie,"
1961. 43 p. (Vsesoyuznoe obshchestvo po rasprostraneniю poli-
ticheskikh i nauchnykh znaniy. Ser.10, Molodezhnaya, no.5).
(MIRA 14:3)

(Textile fibers, Synthetic)

KAPLUNOV, B.I.

Milling narrow grooves. Stan.1 instr.26 no.12:32 D '55.
(Machine-shop practice) (MIRA 9:2)

Kaplunov, B. I.

AID P - 5177

Subject : USSR/Engineering

Card 1/1 Pub. 103 - 18/19

Author : Kaplunov, B. I.

Title : Experiment in gluing specimen to face-plate of turning lathe.

Periodical : Stan. i instr.²⁷, 6, 45, Je 1956

Abstract : It is advisable sometimes to glue certain parts (thin discs or complicated-design parts) to the face-plate of a turning lathe with the BF-2 or BF-4 cement and clamp them securely. Upon completion, such a part can be removed easily from the face-plate by warming it up to 80°.

Institution : None

Submitted : No date

KAPIUTOV, B. [1.]

Potentialities of lathes. IUn.tekh. 2 no.3:60-61 Mr '58. (MIRA 11:3)
(Lathes)

KOBYLIN, Aleksandr Ivanovich, kandidat tekhnicheskikh nauk, dotsent;
LISHUTIN, B.G., redaktor; RASHKOVSKIY, Ya.Z., redaktor; PARTSEVSKIY,
V.N., redaktor; OSTASHENKO-KUDRYAVTSEV, B.P., zasluzhenniy davatel'
nauki, professor, doktor fiziko-matematicheskikh nauk, retsenzent;
KAPLUNOV, B.V., inzhener, retsenzent; PCHEL'NIKOV, inzhener, retsen-
zent; EVENSON, I.M., tekhnicheskii redaktor

[Group equating in mining triangulation] Gruppovoe uravniwanie
rudnichnoi triangulatsii. Moskva, Gos.nauchno-tekhn. izd-vo
lit-ry po cherno i tsvetnoi metallurgii, 1955. 128 p.
(Triangulation) (MIRA 9:2)

KAPLUNOV, B.V.

Use of 1:10,000 topographic maps in the construction design
of industrial and residential buildings. Geod.i kart.
no.5:66-67 My '60. (MIRA 13:7)
(Topographic maps) (Construction industry)

МАПЛУНОВ, Б.В., инж.

Lightweight metal pyramid for special triangulation and mine surveying
work. Gor.zhur. no.6:66 Jo '60. (MIRA 14:2)

1. Yuzhgiproruda, Khar'kov.
(Surveying--Instruments)

KAPLUNOV, B.V.

Laying out a net of squares of control points in commercial areas.
Gor. zhur. no.3:63-64 Mr '61. (MIRA 14:3)

1. Nachal'nik otdela izyskaniy instituta Yuzhgiprordua, g.Khar'kov.
(Mine sureveying)

KAPLUNOV, B.V.

Map of an engineering geology study of the area of a mining enterprise. Razved. i okh. nedr 26 no.6:48-49 Je '60. (MIRA 15:7)

1. Institut Yuzhgiproruda.
(Mining geology—Maps)

KAPLUNOV, D.R., student V kursa

Selecting the best parameters for boring and blasting operations
in ore breaking with deep boreholes. Nauch.rab.stud. GNSO MGI
no.5:23-36 '57. (MIRA 11:11)
(Mining engineering)

KAPLUNOV, D. R

127-58-5-3/30

AUTHORS: Abramov, V.F., Candidate of Technical Sciences, Kaplunov, D.R., and Yakovlev, O.A., Mining Engineers

TITLE: Comparative Estimate of Ore Blasting by Deep Shot-Holes in an Apatite Mine (Sravnitel'naya otsenka otboyki rudy glubokimi skvazhinami na apatitovom rudnike)

PERIODICAL: Gornyy Zhurnal, 1958, Nr 5, pp 10-14 (USSR)

ABSTRACT: The apatite-nepheline mine imeni Kirov has a thick, flat sloping deposit which outcrops at the sides of the mountains. The average thickness of the ore lens varies from 150 to 200 m, and its extension is about 2,200 m. The deposit is mined by the system of forced level caving with ore blasting by large explosive charges. This system of mining had drawbacks. Therefore, a block in the northern part of the Kukisvumchorr deposit was used to conduct experiments in blasting by means of deep shot-holes; up to 50 m long. The block was divided into chambers and pillars with dimensions of 40 to 57.5 m. Altogether 350,000 tons of ore was broken in the chambers and about 400,000 tons in the interchamber pillars. The net cost of the ore from

Card 1/2

127-58-5-3/30

Comparative Estimate of Ore Blasting by Deep Shot-Holes in an Apatite Mine

the experimental block turned out to be approximately the same as in the ordinary method of applying large charges. However, the technico-economical indices of the deep hole method can be considerably improved, when the proposed scheme of hole distribution in the block, shown in Figure 3, is applied. It is concluded that this method will prove to be more efficient and will replace the latter in the mines of the Apatit Combine. There are 3 figures and 2 tables.

ASSOCIATION: GIGKhS *State Inst of Mining-Chemical Raw Materials*

AVAILABLE: Library of Congress

Card 2/2 1. Mines-Blast effects

SOV/118-58-1-4/16

AUTHORS: Abramov, V.F., and Kaplunov, D.R., Engineers

TITLE: The Use of Powerful Scraper Winches in the Delivery of Ores
(Primeneniye moshchnykh skrepernykh lebedok na vypuske rudy)

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, Nr 1,
pp 15-17 (USSR)

ABSTRACT: The workers of the Gosudarstvennyy institut gornokhimicheskogo syr'ya (State Institute of Chemical Raw Material Mining), in cooperation with the workers of the mine imeni S.M. Kirov of the "Apatit" kombinat (the "Apatite" Combine), are studying the conditions for the utilization of powerful scraper winches in mines. In 1955/56 scraper winches of the type SEL-55 (capacity - 55 kw) and "Kaliy-4" (capacity - 75 kw), of which the operating capacity ranged between 100 and 400 tons per shift, were used. Practice showed, however, that operating expenses were too high. Timing of operations and technical analysis have proved that a further improvement of technical and economic indices can be achieved only by applying more powerful scraper winches with a power capacity ranging from 100 to 120 kw. The use of powerful scraper winches necessitates the construction of dependable

Card 1/2

SOV/118-58-1-4/16

The Use of Powerful Scraper Winches in the Delivery of Ores

equipment, but for lack of specialized plants which could produce experimental models, the designing of efficient scrapers is hampered.

There are 3 diagrams, 2 tables, and 1 Soviet reference.

1. Earth moving equipment--Performance
2. Hoists--Applications

Card 2/2

AUTHORS: Abramov, V. F., Kaplunov, D. R.

SOV/64-58-6-9/15

TITLE:

Experience in Working the Scraping Stage at the
Mine imeni S. M. Kirov of the "Apatit"
Kombinat (Opyt ekspluatatsii gorizonta skreperovaniya na
rudnike imeni S. M. Kirova kombinata "Apatit")

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 6, pp 354-357(USSR)

ABSTRACT:

In almost all mines the working of blocks in thick deposits has so far been, and still is being, done with a level of screening. This method has a number of shortcomings which prevent further improvement. The drawbacks are enumerated. In the mine mentioned by the title the cooperators of GIGKhs and the workers of the mine and kombinat jointly tested huge scraper windlasses of the levels of scraping. These tests make it possible to draw some conclusions and give recommendations. At the crosscuts 1, 2, and 3 the windlasses ~~SEL~~ -55 with a capacity of 55 kW were used, at crosscuts 4 and 5 windlasses "Kaliy-4" with 75 kW capacity. It was found that the closeness of the land mine arrangement characterized by the relation - tons of discharged ore to one land mine - depends on the granulometric composition of the discharged

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ore. A table of calculations regarding the technical and economic characteristics is added as well as a table of the cost of exploitation of material with the same granulometric composition on the level of screening, and data for a comparison between levels of scraping and screening, with cost calculations for previous minings. According to these, total outlays for a discharge working with level of scrapings are smaller than those for one working with level of screening and the level seems to be more convenient. In the mine mentioned by the title it was found that in the case of ore cutting with vertical interstices three per cent of the material show deviations from the standard size. There are 5 figures and 3 tables.

ASSOCIATION: Gosudarstvennyy institut gornokhimicheskogo syr'ya
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Perfecting the system of mining with mass caving of the ore. Gor.
zhur. no. 6:24-29 Je '61. (MIRA 14:6)

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